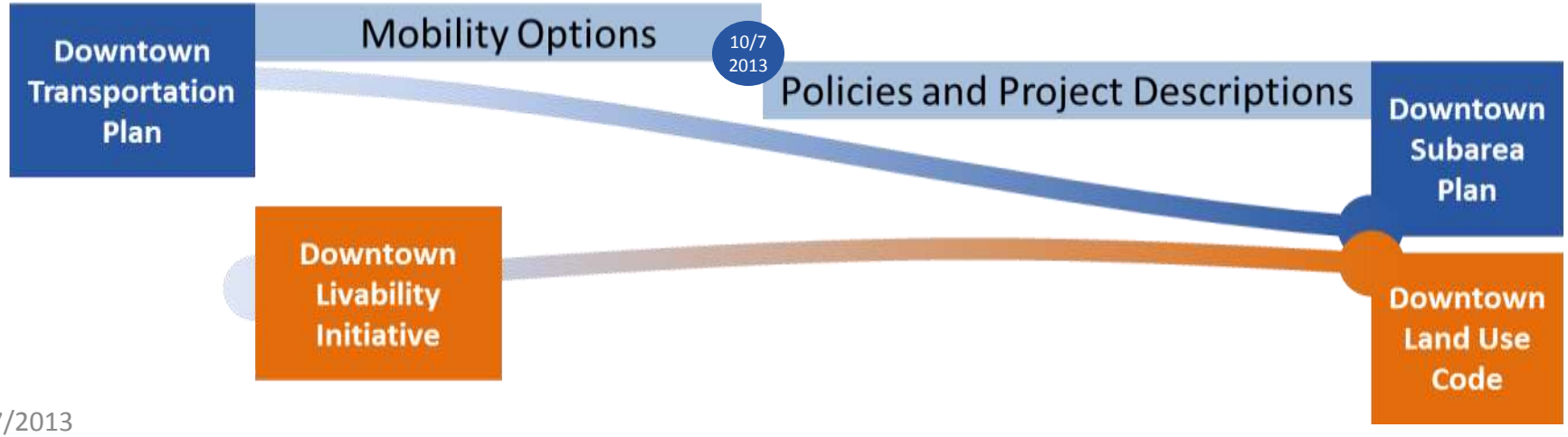
TRANSPORTATION COMMISSION RECOMMENDATIONS DOWNTOWN BELLEVUE MOBILITY

BELLEVUE CITY COUNCIL
OCTOBER 7, 2013

Purpose of Discussion Tonight

- Review recommended mobility options
- Direction from Council to proceed with:
  - Developing policies and project descriptions
  - Refer some pieces to the Downtown Livability Initiative
  - Integrating Downtown Transportation Plan with Downtown Livability Initiative in Subarea Plan and Land Use Code recommendations



Presentation Overview

- Public Involvement Summary
- Planning Principles
- Land Use and Travel Demand
- Transportation Commission recommendations for each mobility option

Public Involvement Summary

- Walking and bicycling tours
- Open Houses – DTP alone and jointly with DLI
- Community Groups
  - Bellevue Downtown Association
  - Bellevue Chamber of Commerce
  - Building Owners and Managers Association
  - Eastside Transportation Association
  - Easy Rider Collaborative (Human Services Commission)
- 7 City Council briefings
- 25 Transportation Commission meetings
  - June 11, 2011 – September 12, 2013
- Professional Organizations
  - ITE, ASCE, APA (pending)
- Web site: http://www.bellevuewa.gov/downtown-transportation-plan-update.htm

Planning Principles

Adopted by City Council February 6, 2012

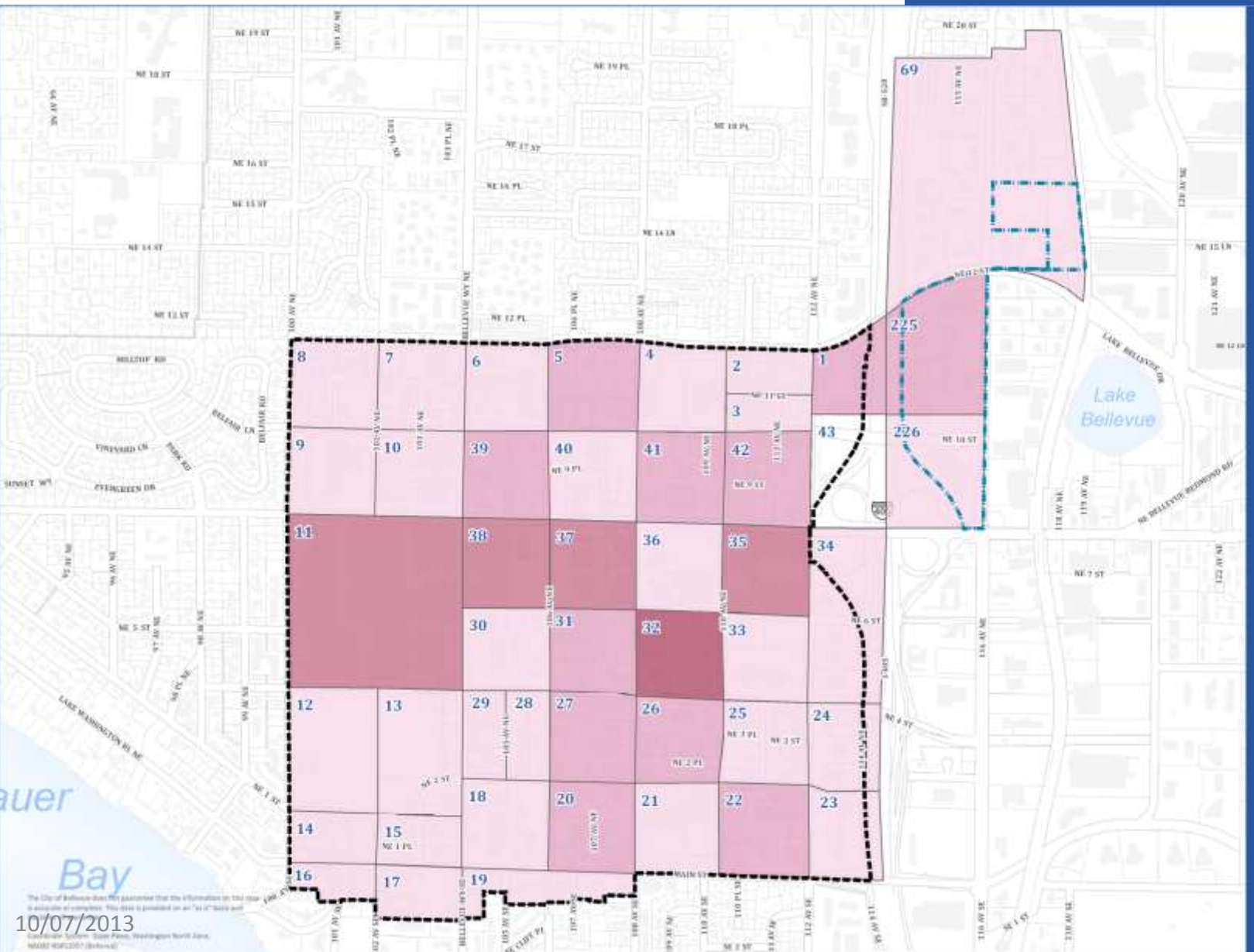
- **Plan for multiple modes of travel within and to and from Downtown Bellevue**
- Accommodate the anticipated travel demands from the 2030 land use forecast
- Advance the adopted vision for Downtown Bellevue
- Recognize changes in the regional and local transportation and land use environment
- Integrate prior City Council direction
- Provide for comprehensive public involvement
- Minimize traffic impacts on neighborhoods
- Involve regional transportation and planning partners
- Leverage funding from outside sources to implement projects
- Utilize measures of effectiveness to evaluate potential projects

Downtown Land Use Forecast

	1990	2000	2010	2030	2010/2030 Growth
Employment	22,257	34,042	**42,525**	**70,300**	**+27,775**
Population	1,182	2,588	**7,147**	**19,000**	**+11,853**

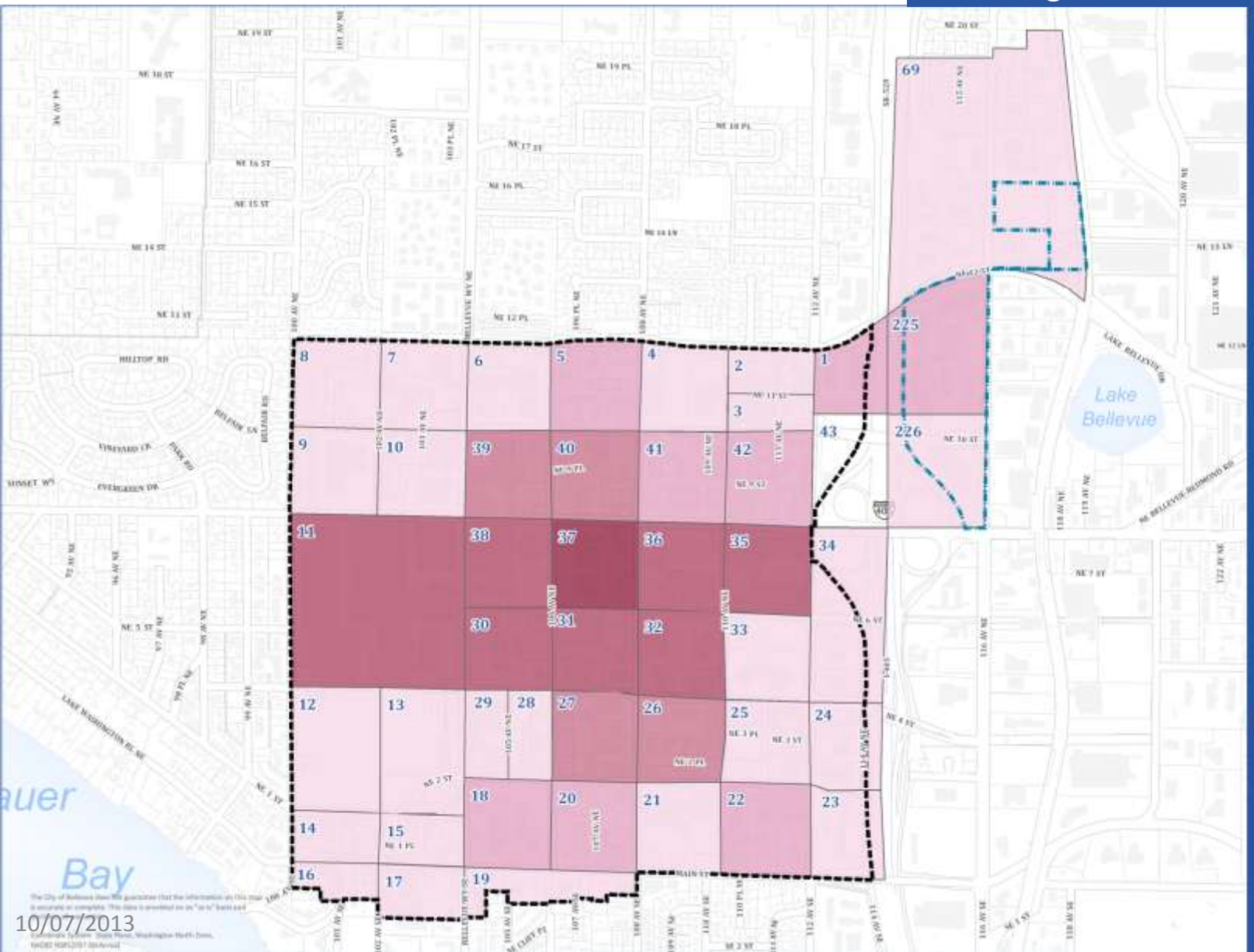
Downtown Population + Employment 2010

Including Medical Institution District



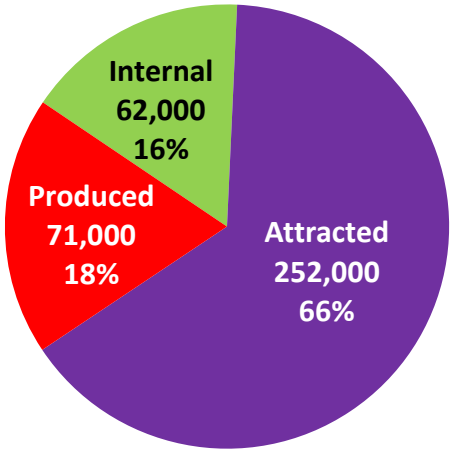
Downtown Population + Employment 2030

Including Medical Institution District



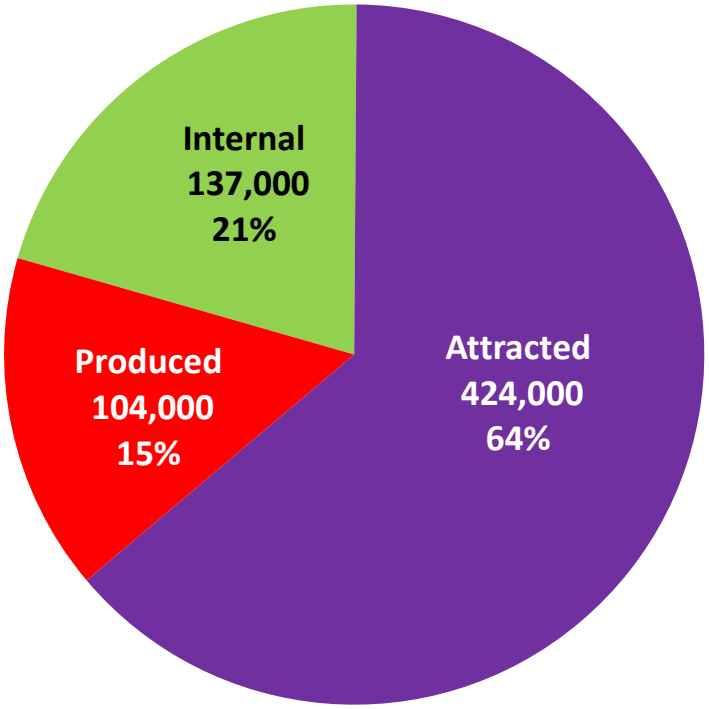
BKR Model – Total Downtown Person Trips

2010 Daily Person Trips



~ 385,000

2030 Daily Person Trips



~ 665,000

Downtown Mobility Options

Vehicles

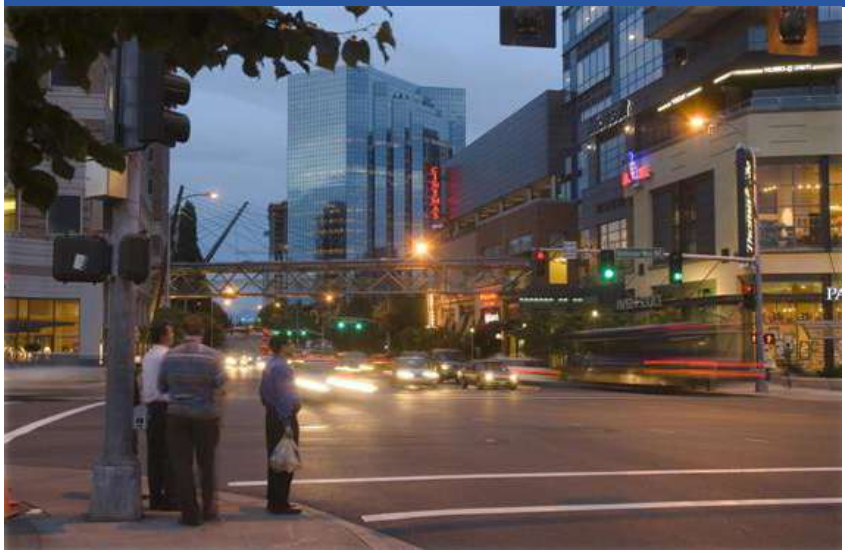
Transit

Bicycles

Pedestrians

Downtown Vehicle Mobility

Downtown Access



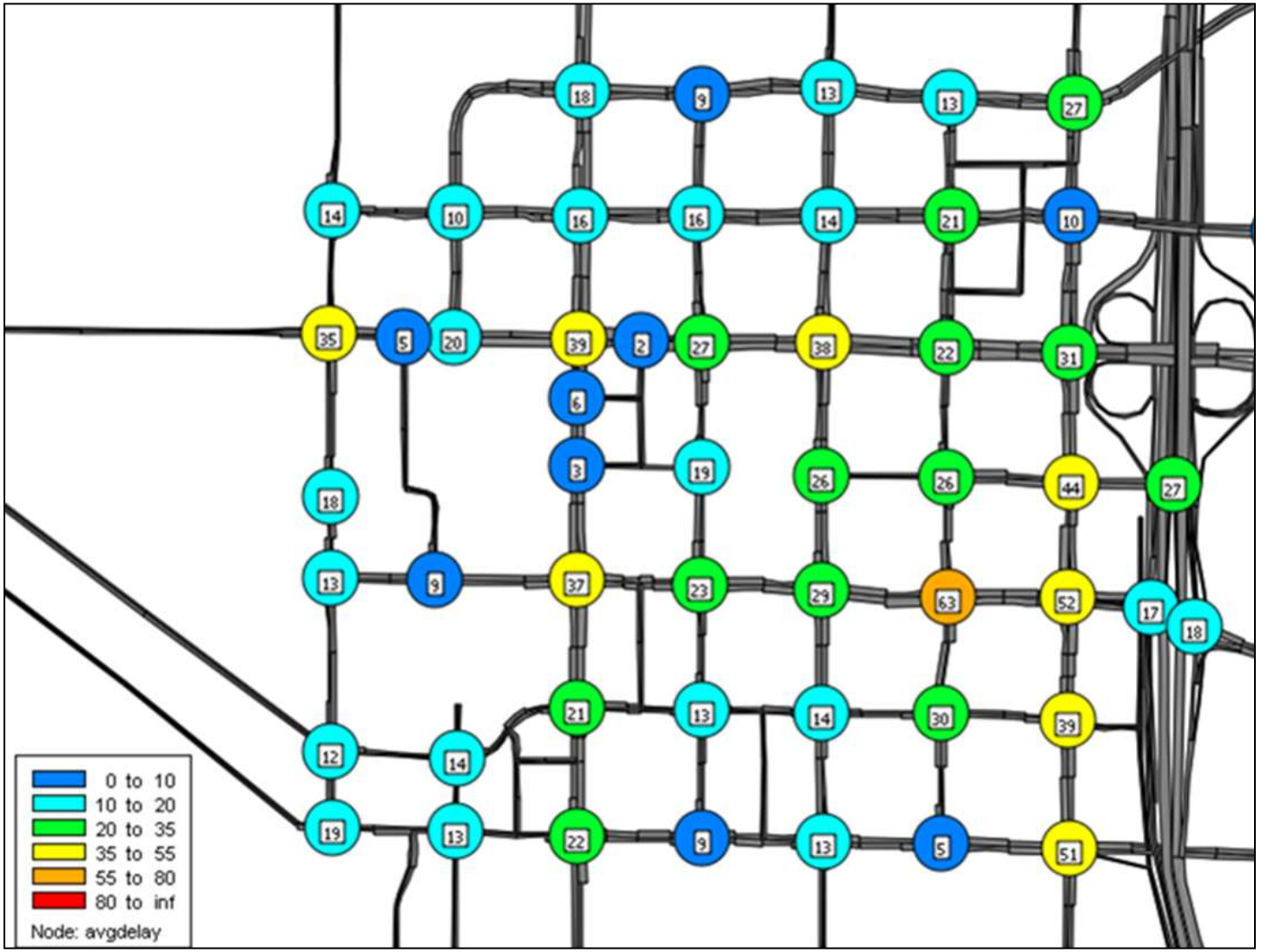
Regional + Neighborhood Access

Roadway Capacity

Roadway Operations

BELLEVUE
INTELLIGENT TRANSPORTATION SYSTEMS

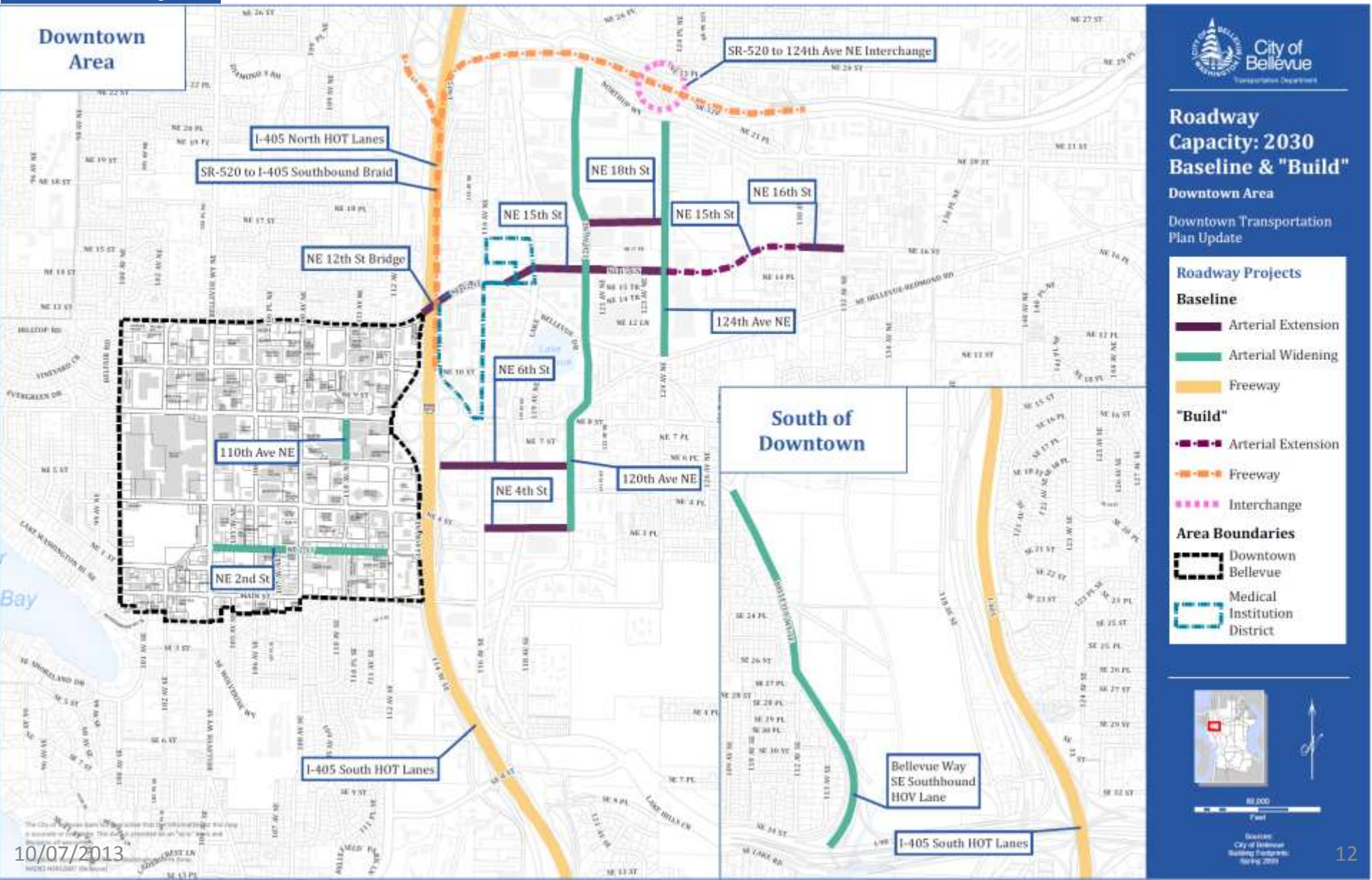
PM Peak Average Intersection Vehicle Delay and LOS Traffic Operational Model (Dynameq)



2010 Base Year Vehicle Delay/LOS

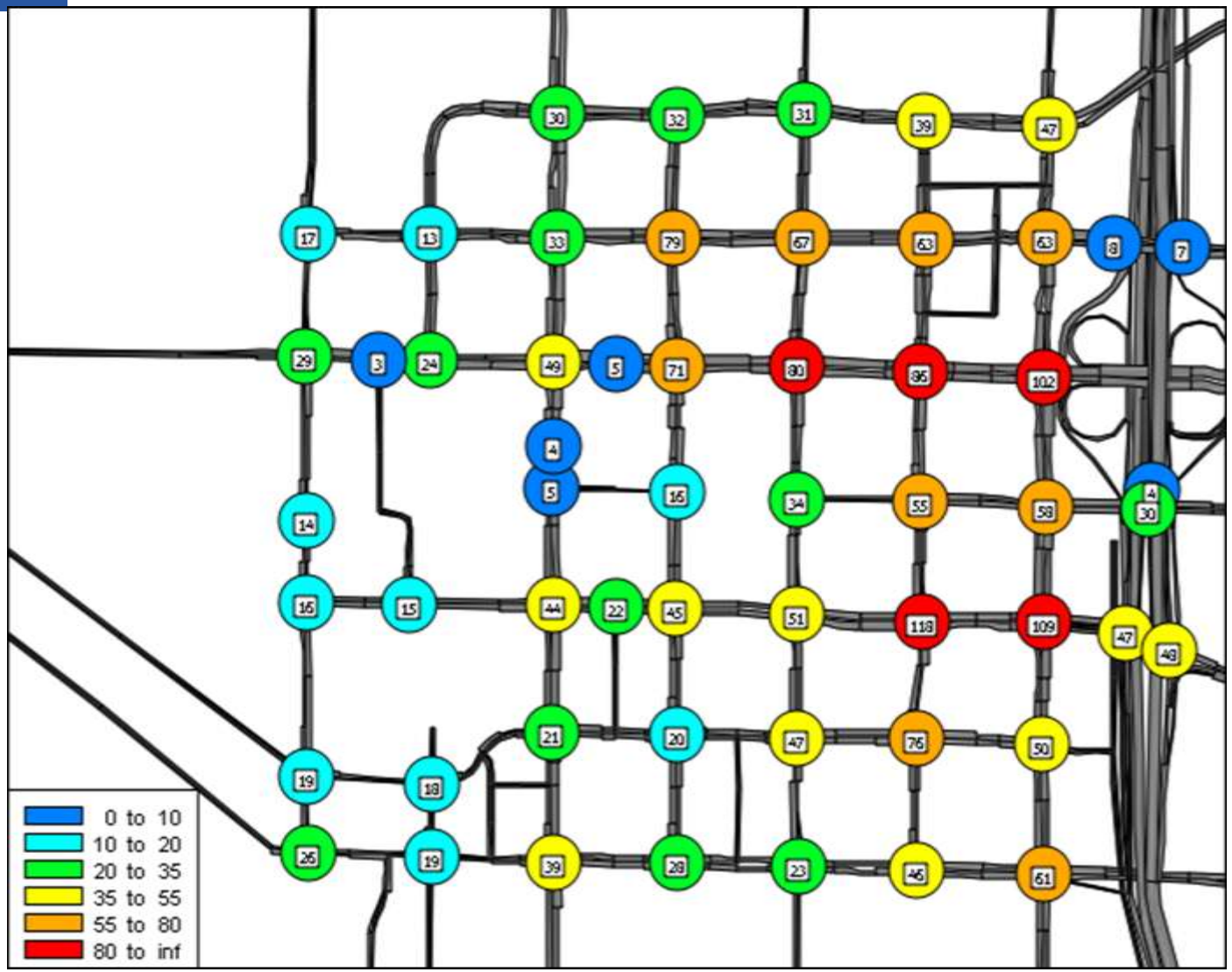
Private Vehicle Mobility

2030 Baseline + Build Roadway Capacity Projects



Private Vehicle Mobility

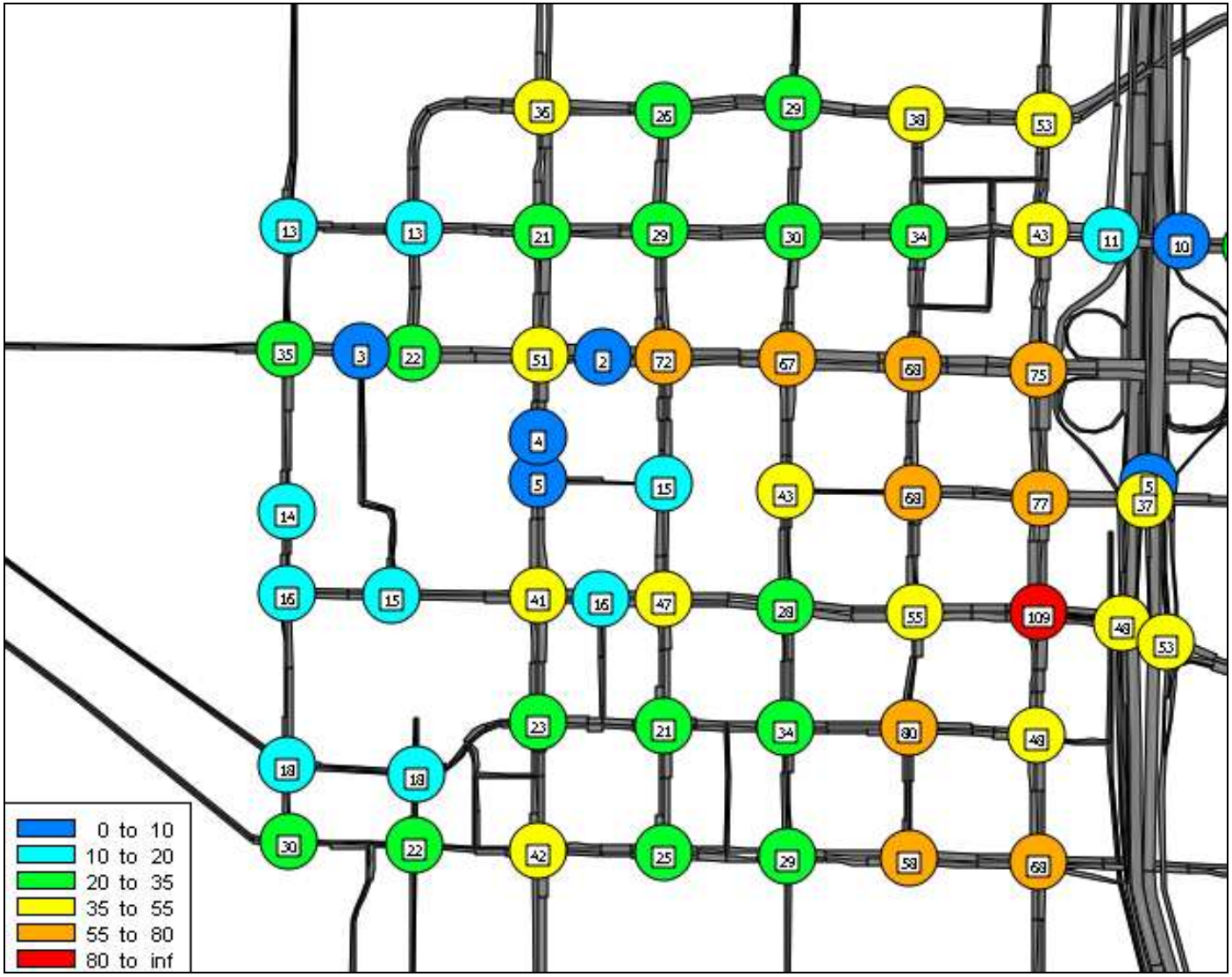
PM Peak Average Intersection Vehicle Delay and LOS (Dynameq)



2030 "Baseline" Vehicle Delay/LOS

Private Vehicle Mobility

PM Peak Average Intersection Vehicle Delay and LOS (Dynameq)



2030 "Build" Vehicle Delay/LOS

Private Vehicle Mobility

Roadway Capacity

Recommendations

- Support and advocate for 2030 “Baseline” + “Build” Scenario Roadway Vehicle Capacity Projects that support Downtown mobility
  - Bellevue TFP/CIP
  - Washington State DOT
- Continue to advance the implementation and refinement of roadway operations technology (SCATS)
- Acknowledge roadway capacity project ideas that have emerged during the process, but are not part of the planned 2030 network

On-Street Parking

Permanent Parking

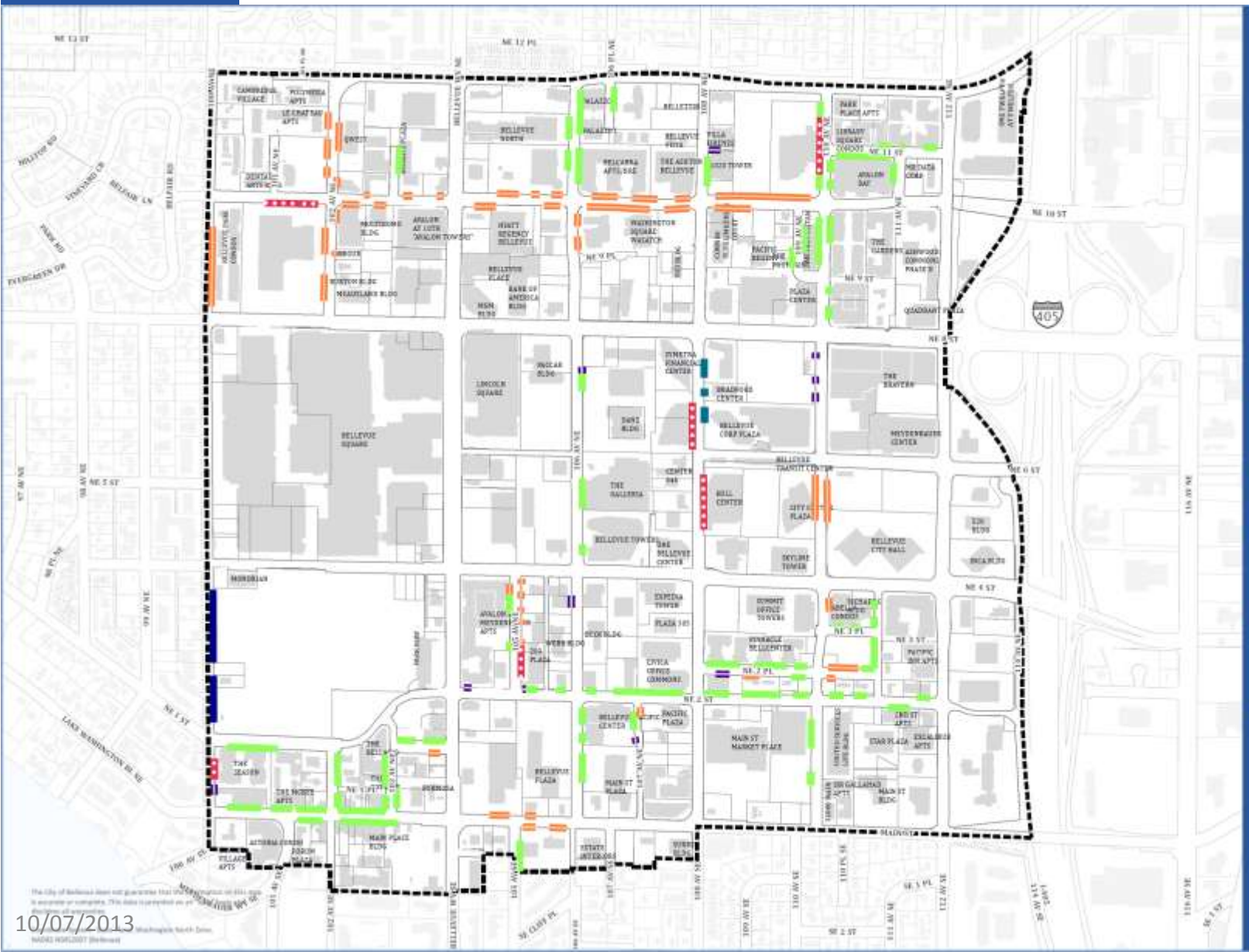
Off-Peak Parking

Pay for Parking

Private Vehicle Mobility

On-Street Parking: Evaluation Findings

Existing Parking plus Potential New Locations



City of Bellevue
Transportation Department

On-Street Parking Supply

Downtown Transportation Plan Update

On-Street Parking

Opportunity for New Stalls

- High Opportunity for New Stalls
- Moderate Opportunity for New Stalls

Existing Parking Stalls

- 2 Hr Parking 7am-6pm Except SUN & HOL
- No Parking 7am-6pm Except SUN & HOL
- No Parking 7am-6pm Except SAT, SUN & HOL

Existing Curb Uses

- Transit Layover Area

Area Boundaries

- Downtown Bellevue

Private Vehicle Mobility

On-Street Parking

Recommendations

- Add permanent on-street parking at “high opportunity” locations, provided these meet current engineering standards

- Analyze “moderate opportunity” locations to determine the value of this parking relative to the costs of adding these parking spaces

Private Vehicle Mobility

Pay for Parking

Recommendations

- Develop a pay for parking program proposal through the budget process

- Utilize parking revenue for parking program management and enforcement, and to fund Downtown streetscape enhancements

Other Curbside Uses

Loading Zones

Park(ing) Day

Taxi Stands

Electric Vehicle Charging Stations

Passenger Pick-Up/Drop-Off

Bicycle Parking

Other Curbside Uses

Loading Zones

Recommendation

Integrate on-site loading space and/or create designated curb loading space through development review

Refer to Downtown Livability Initiative

Other Curbside Uses

Passenger Pick-Up/Drop-Off

Recommendation

Designate time-limited curbside pick-up/drop-off zones through development review

Refer to Downtown Livability Initiative

Other Curbside Uses

Taxi Stands

Recommendation

Designate curbside taxi stands and consider locational criteria as follows:

- Close to generators of pedestrian traffic
- Where on-street parking is allowed or in a specifically designated taxi-stand pull-out
- Evening and weekend temporary curbside use to support nearby businesses

Other Curbside Uses

Electric Vehicle Charging Stations

Recommendation

Allow electric vehicle charging stations to be installed in permanent on-street parking spaces

Park(ing) Day

Bicycle Parking

Recommendation

Support curbside uses such as Park(ing) Day, and bicycle corrals to be installed in a permanent on-street parking space on a case-by-case basis as requested by nearby businesses, and bike-share docking stations

Downtown Transit Mobility

Coverage

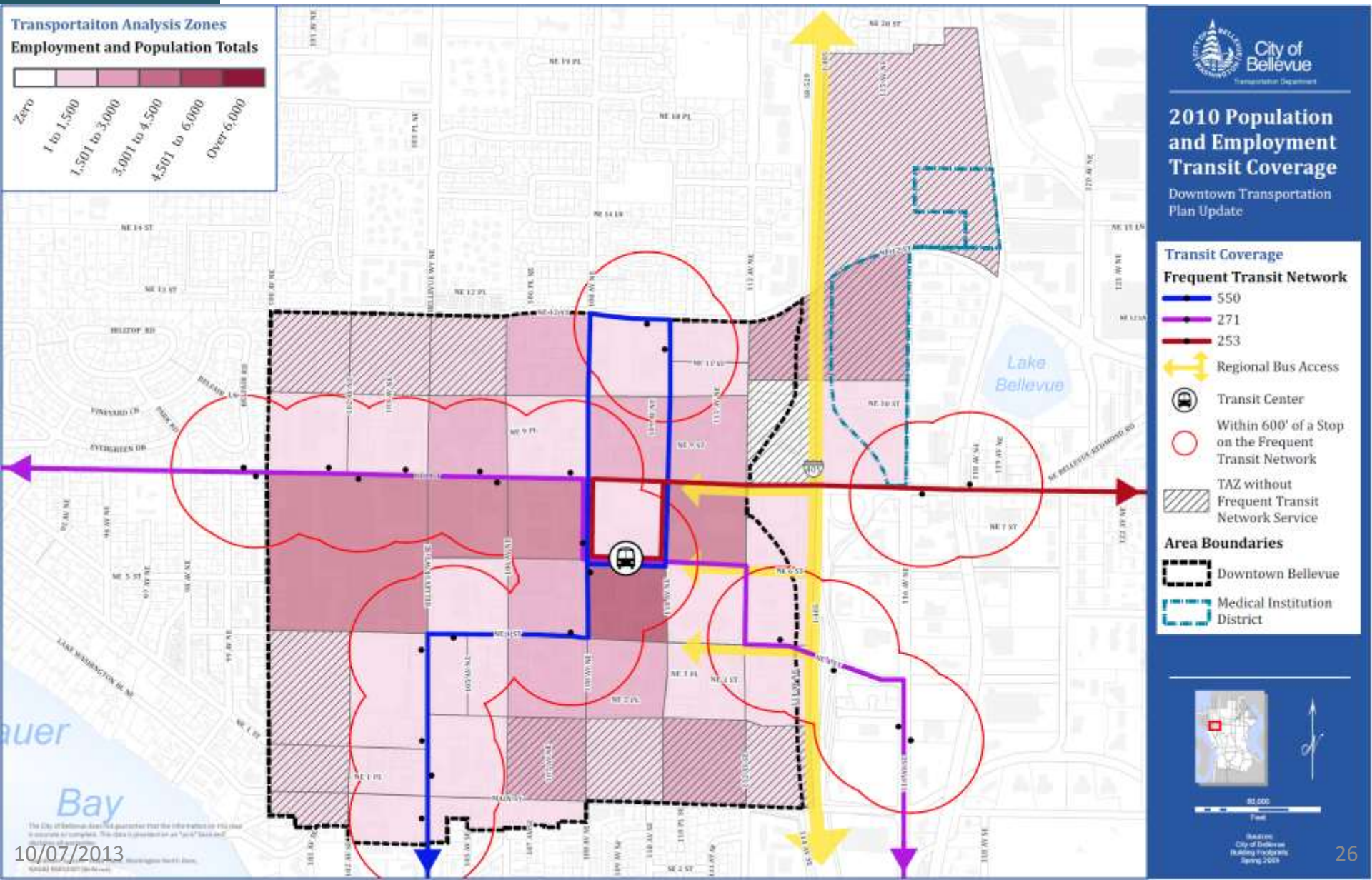
Speed and Reliability

Capacity

Comfort/Access/Information

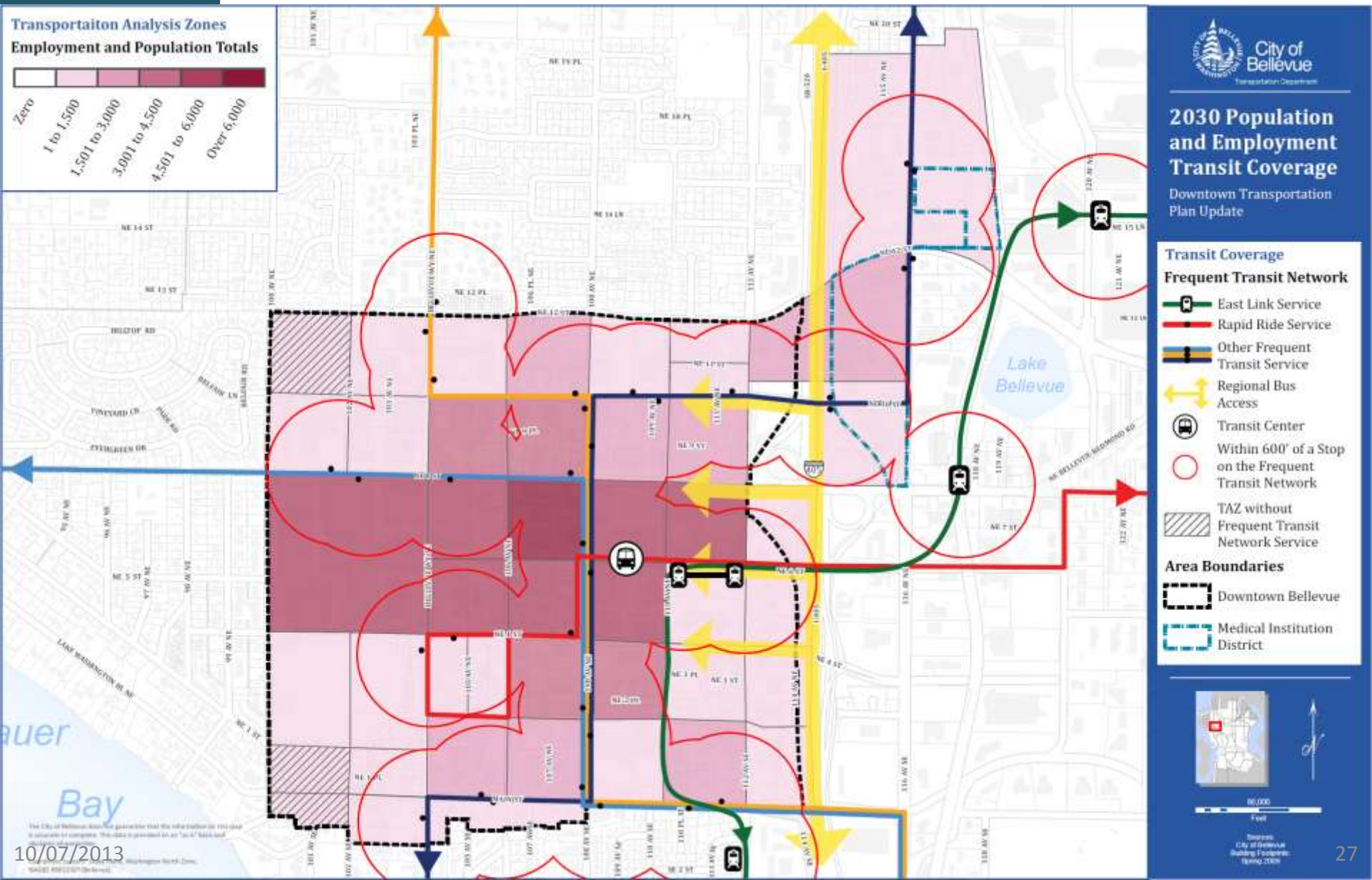
2010 Transit Coverage: 86%

Frequent Transit Network Routes



2030 Transit Coverage: 97%

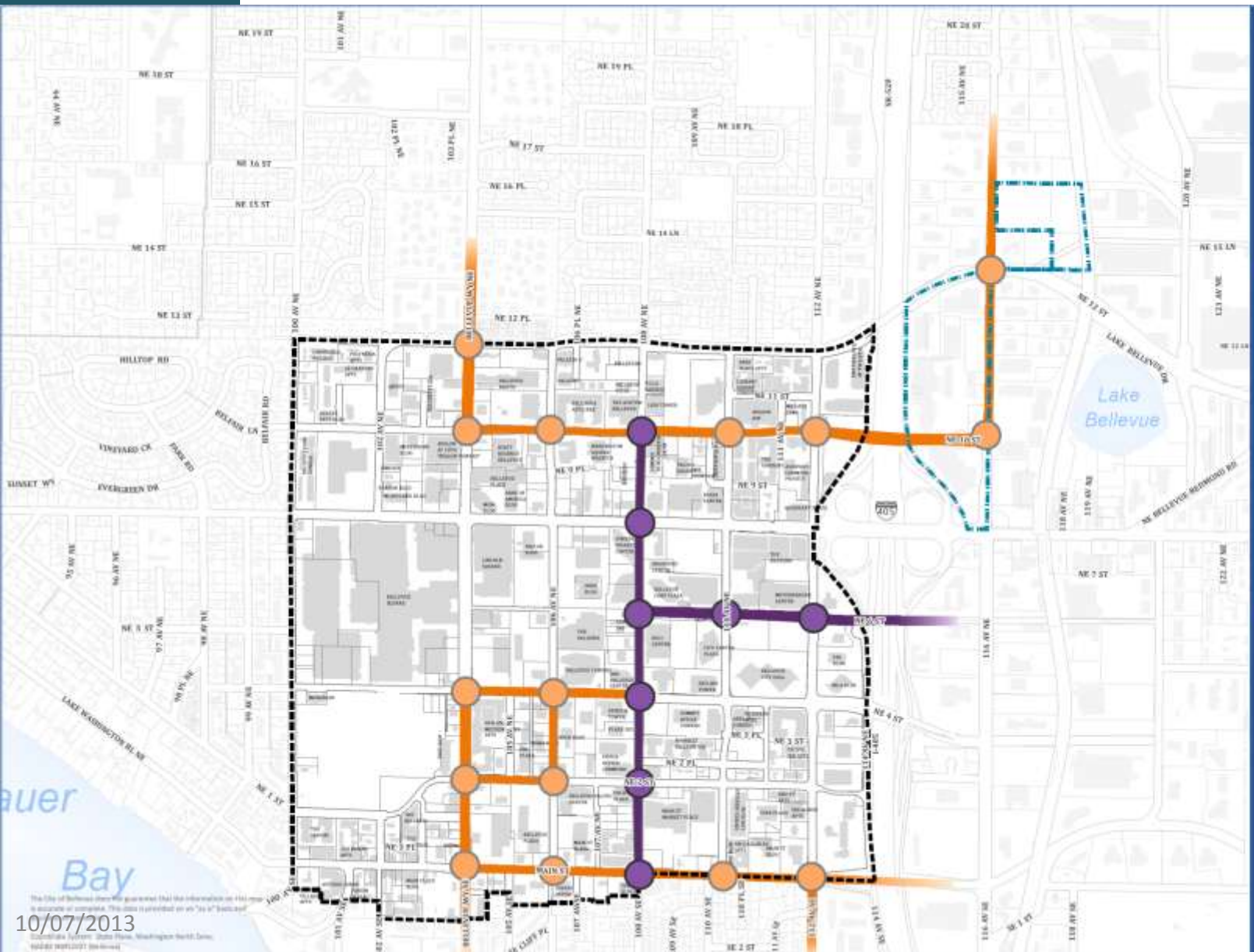
Recommended Frequent Transit Network Routes



Transit Rider Mobility

2030 Transit Priority Network

Recommendation Consistent with draft Transit Master Plan



Transit Rider Mobility

Transit Recommendations

- **Transit Coverage**
  - Distribute frequent transit network to serve Downtown Bellevue residents and employees and relieve pressure on the Bellevue Transit Center
- **Transit Speed and Reliability**
  - Designate Transit Priority Corridors/Intersections as candidates for speed and reliability improvements
  - Base prioritization and implementation on transit vehicle and passenger volume and operational issues – passenger delay
- **Transit Capacity**
  - Advocate for transit service to meet anticipated 5-fold increase in Downtown Bellevue transit demand by 2030
  - Identify potential transit layover spaces in or near Downtown

Transit Recommendations

- **Transit Passenger Comfort, Access and Information**
  - Define transit stop "types" describe context-appropriate components for each type of transit stop
    - Local Transit Stop
    - Primary Transit Stop
    - Frequent Transit Network/RapidRide Station
    - Transit Center/Multi-Modal Hub
  - Unclutter Bellevue Transit Center platform space for better passenger queuing and weather-protected station access

Recommended Transit Center Access Improvements

Before (Existing)	After (Visualizations)
	
	

Concept presented to Sound Transit for station access

Downtown Bicycle Mobility

Local Connections

Regional Connections

Getting Around Downtown

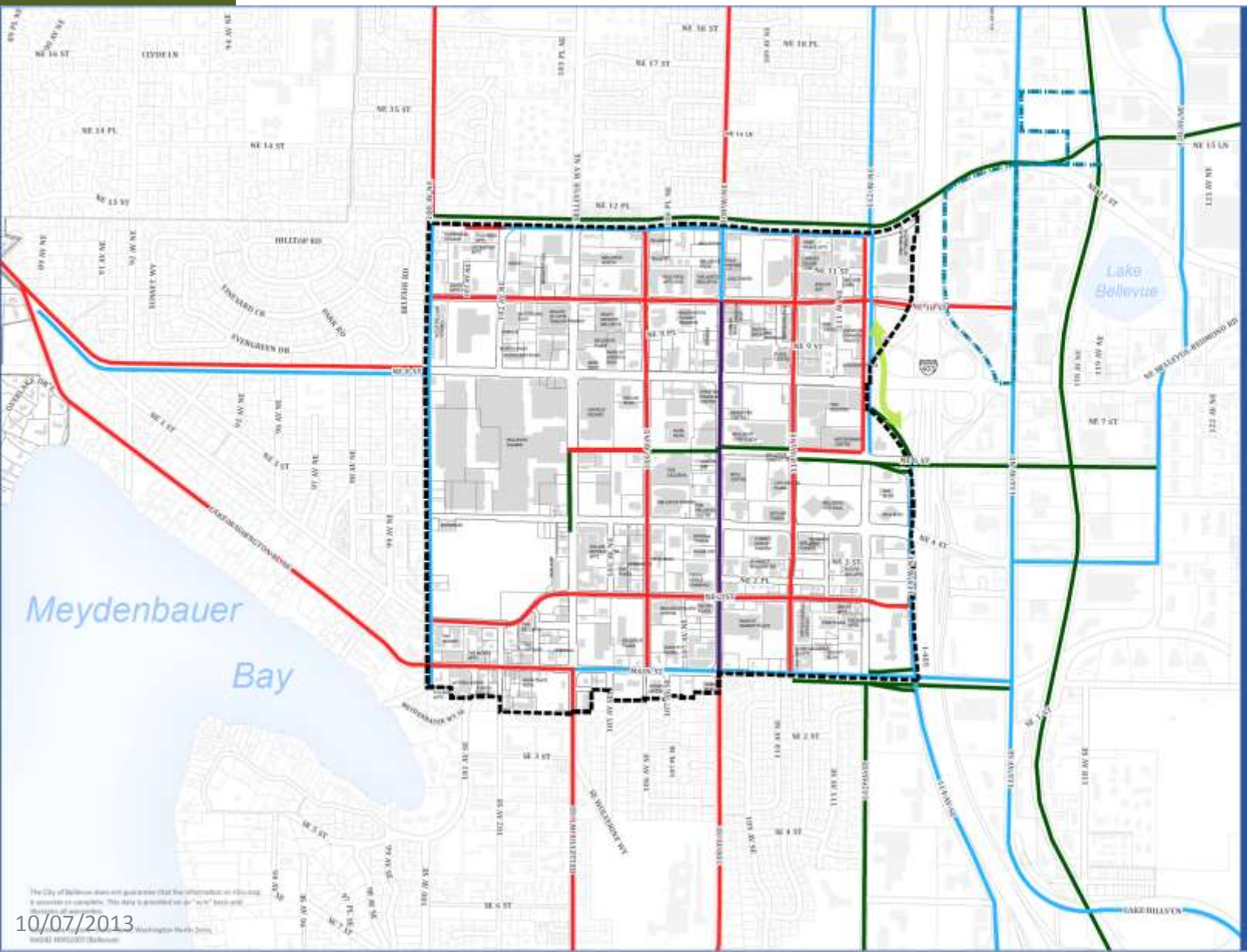
Parking

Commuting

Bicyclist Mobility

Downtown Bicycle Facilities

On-Street Bicycle Facility Recommendations



Downtown Bicycle Facilities

Bicycle Parking Recommendations (End of trip facilities)

- **Short-term Parking**
  - Continue to implement Downtown bicycle parking program to support nearby retail and residential uses. Include bicycle corrals and bike share docking stations in high demand areas
- **Transit Access**
  - Integrate bicycle access and parking facilities with transit stops and stations
- **Commuter Parking**
  - Require secure on-site bicycle parking development. Include lockers and showers.
    Refer to Downtown Livability Initiative

Downtown Bicycle Facilities

Design concept for Pedestrian Corridor

Concept discussed with ST for station access by bicycle through the Bellevue Transit Center

Better integrate wheeled users and wayfinding into the design of the Pedestrian Corridor

Refer to Downtown Livability Initiative

Downtown Pedestrian Mobility

Crosswalks

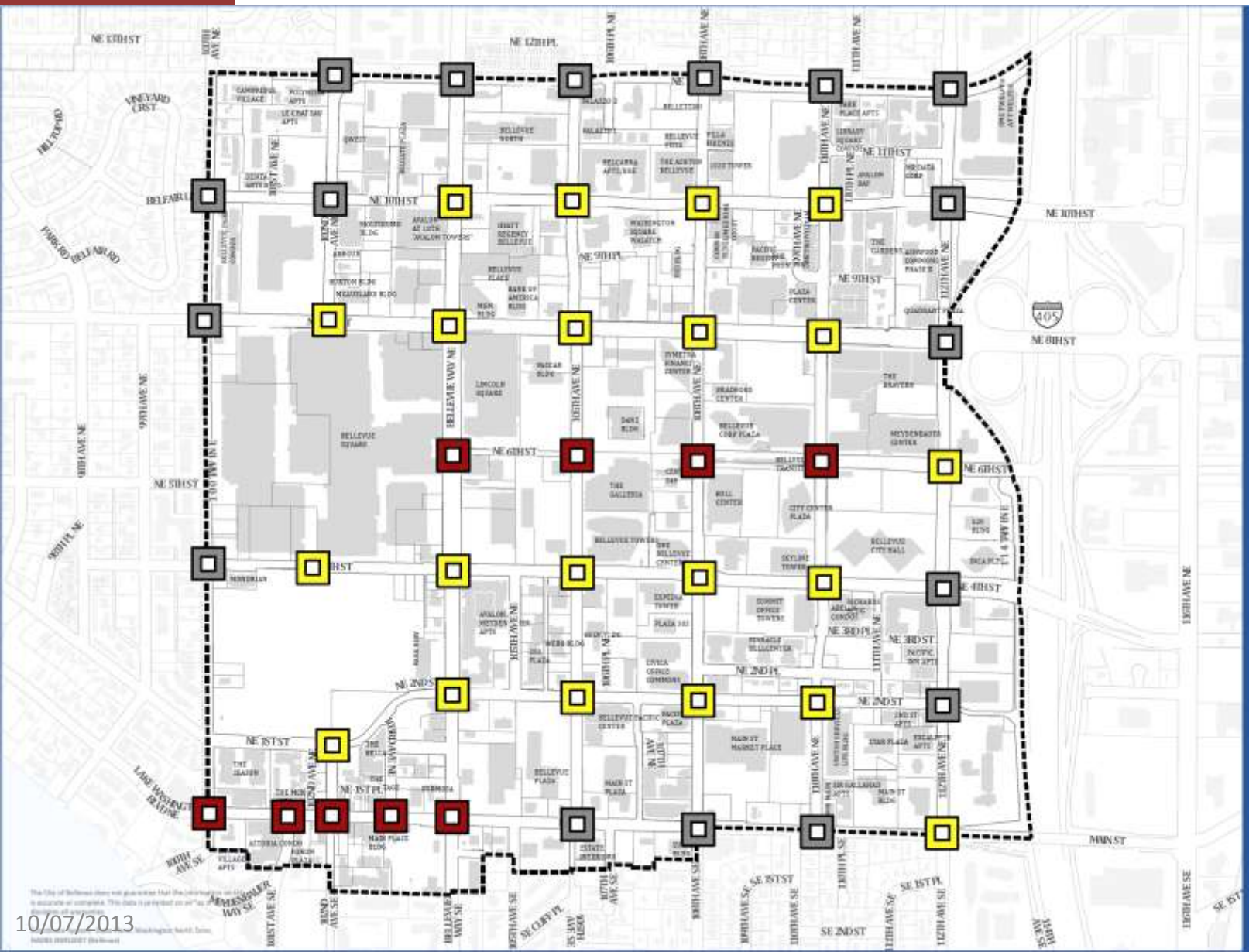
Mid-Block Crossings

Sidewalks

Through-Block Connections

Downtown Crosswalks

Recommended Crosswalk Designations



City of Bellevue
Transportation Department

Proposed Crosswalk Designations

Downtown Transportation Plan Update

Crosswalk Designations

Crosswalk Typologies

- Enhanced
- Exceptional
- Standard

Area Boundaries

- Downtown Bellevue

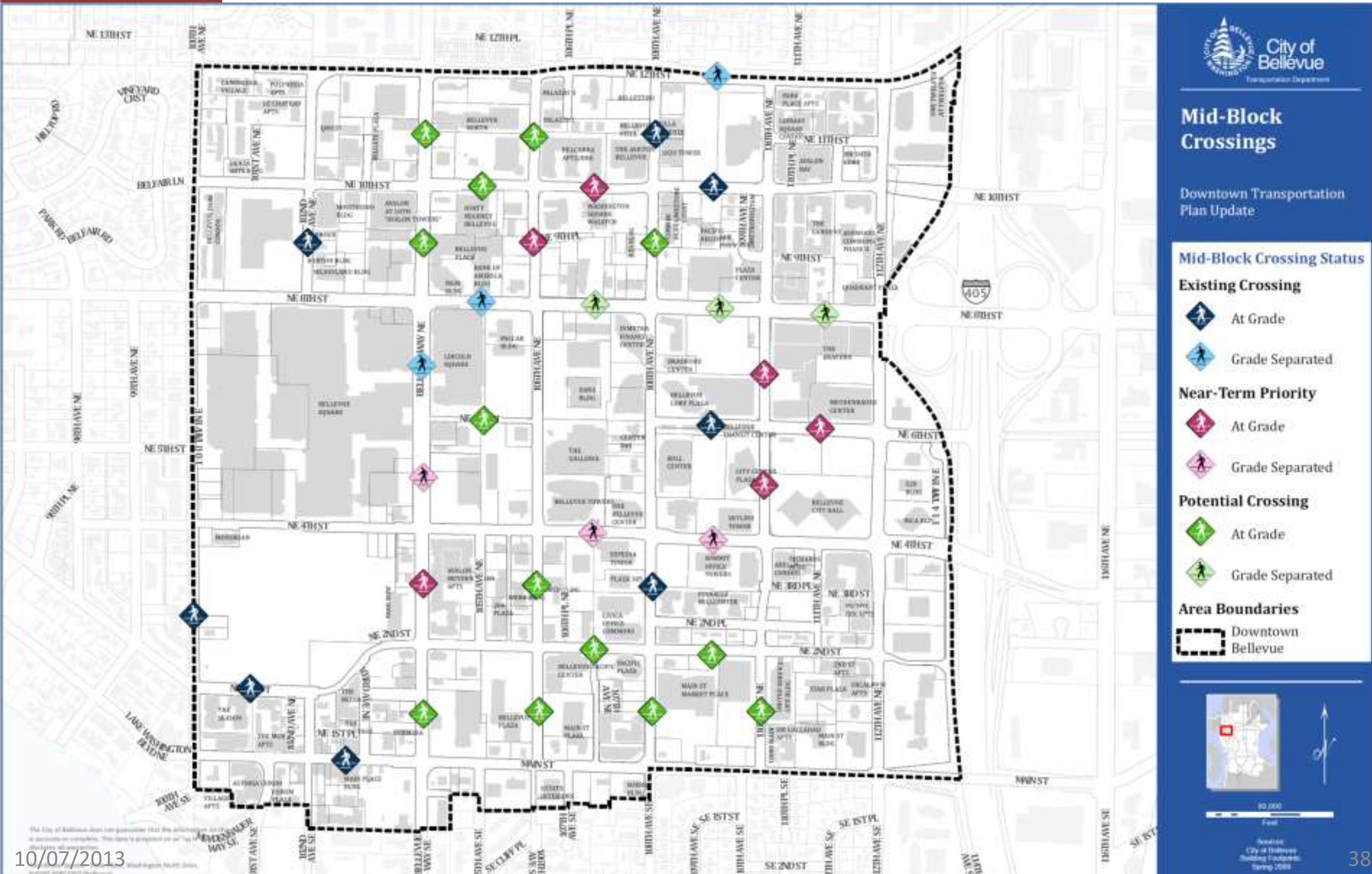
Feet

Sources:
City of Bellevue
Building Footprints
Spring 2009

Pedestrian Mobility

Downtown Mid-Block Crossings

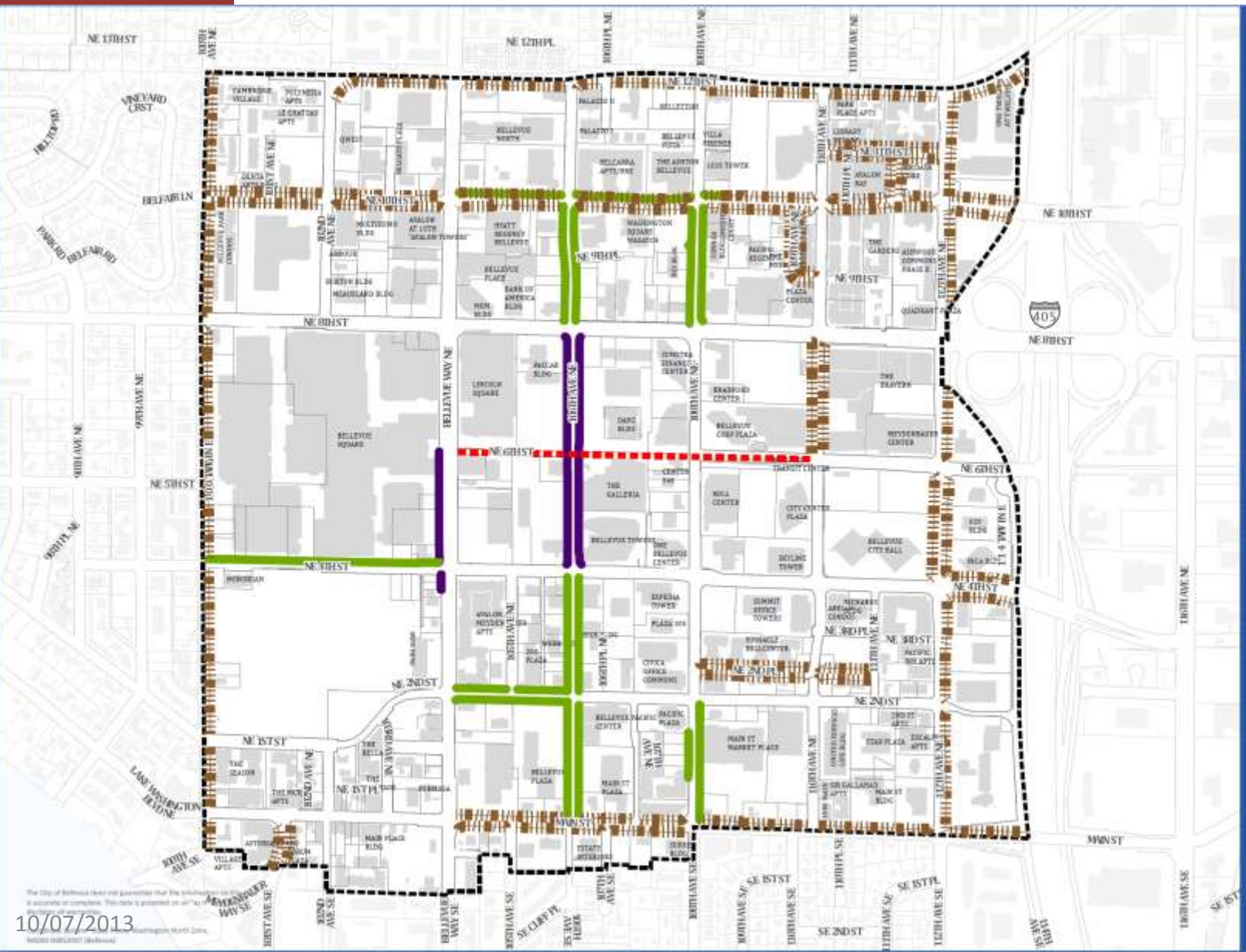
Recommended Mid-Block Crossings



Pedestrian Mobility

Downtown Sidewalks and Landscaping

Sidewalk and Landscaping Changes from Code *(Refer to DLI)*



Pedestrian Mobility Recommendations

Through-block Connections Design Concepts

- Create public access wayfinding
- Use commonly recognizable paving material or inlays
- Implement universal accessibility according to ADA standards

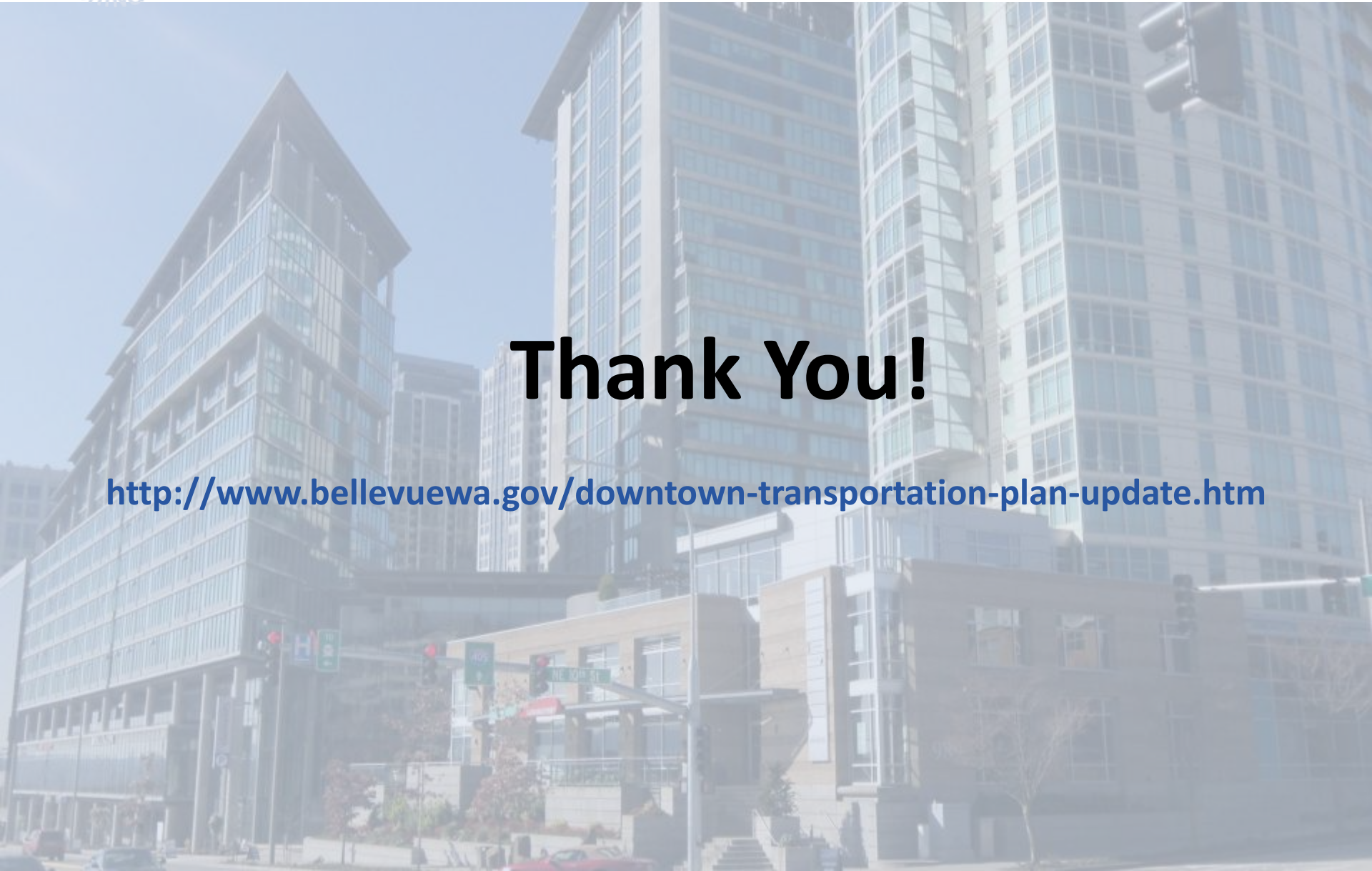
Refer design concepts to Downtown Livability Initiative

Referrals to Downtown Livability Initiative

- **Loading/Pick-up/Drop-off**
  - Accommodate uses on site or curbside through development review
- **Transit Passenger Comfort, Access and Information**
  - Integrate transit stop improvements as a component of new development
- **On-Site Bicycle Parking Facilities**
  - Provide secure, long-term bicycle parking in new development, plus lockers and showers for commuters
- **Sidewalk Width**
  - Increase width from 12 to 16 feet and from 16 to 20 feet along specified street segments
- **Curbside Landscaping**
  - Require planter strip with street trees instead of street trees in tree grates along specified street segments
- **Through-Block Connections**
  - Revise design guidelines to enhance pedestrian access and navigation
- **Pedestrian Corridor Design Components**
  - Better accommodate wheeled users and improve access to Transit Center and Light Rail Station

NEXT STEPS

- Ongoing community outreach
  - Outreach often paired with the Downtown Livability Initiative
  - DTP-specific briefings with stakeholder groups, BDA, etc.
- Transportation Commission prepares Downtown Subarea Plan policy language and project descriptions
- Integrate Downtown Transportation and Downtown Livability in Subarea Plan and Land Use Code recommendations
- Policy, project and code recommendation to Planning Commission and City Council



Thank You!

http://www.bellevuewa.gov/downtown-transportation-plan-update.htm

Private Vehicle Mobility

Dynameq Modeling Summary Transit Vehicles Included

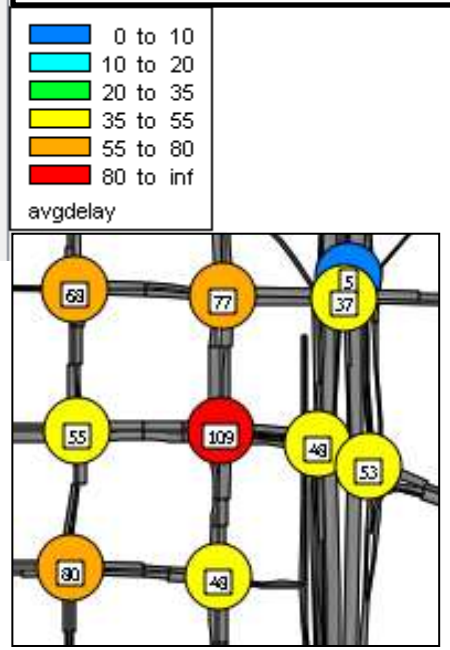
Downtown	2010 Base Year	2030 "Baseline"	2030 "Build"
PM Peak Hour Vehicle Volume	82,000	110,000	118,000
Average Intersection Delay (seconds per vehicle)	27	56	49
Level of Service	**C**	**E**	**D**
Source: Dynameq Model. Includes transit assumptions			

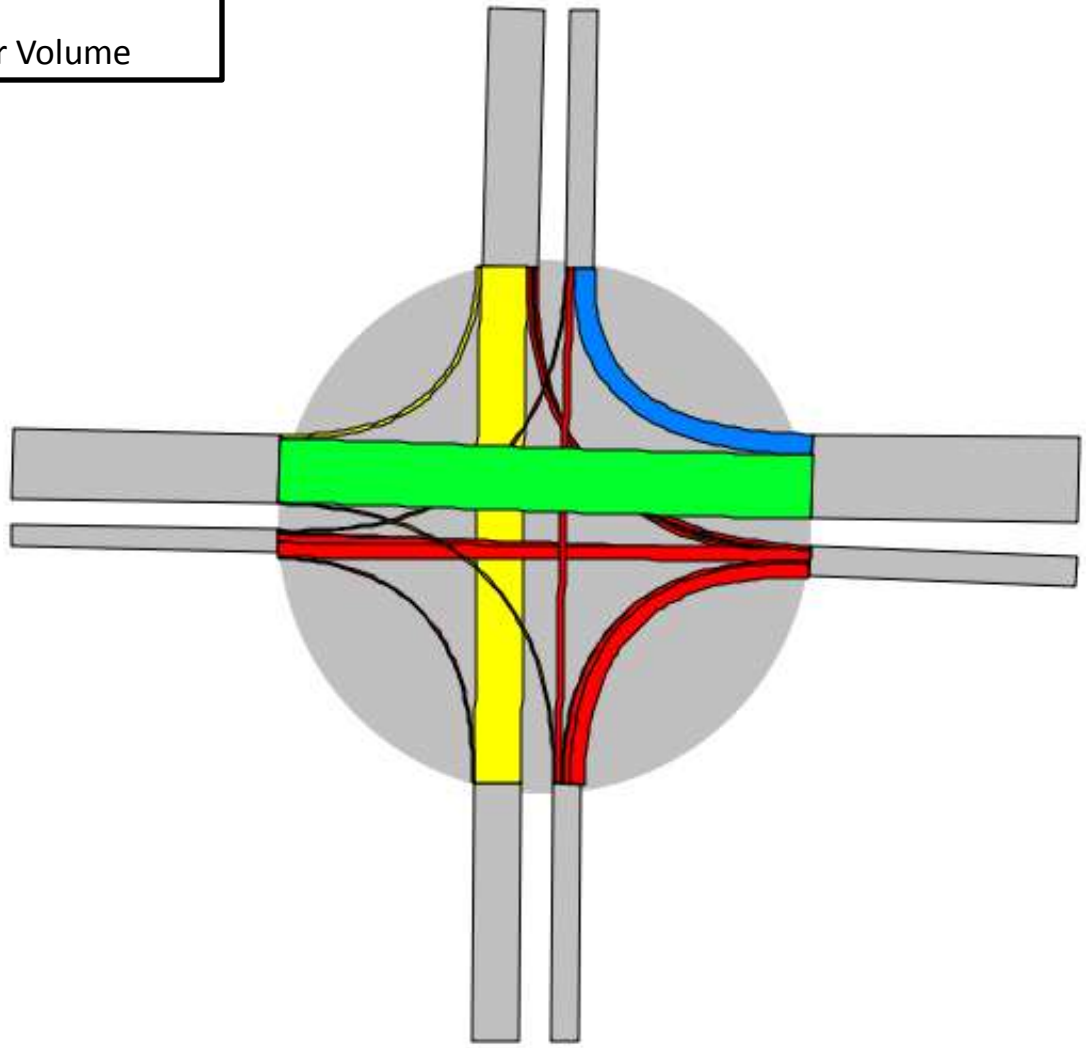
Level of Service	Average Delay (seconds/vehicle)
A	≤ 10
B	> 10 – 20
C	> 20 – 35
D	> 35 – 55
E	> 55 – 80
F	> 80
Source: Highway Capacity Manual, Transportation Research Board, 2000	

Private Vehicle Mobility

112th Avenue NE/NE 4th Street (Dynameq)

2030 PM Build w/ Transit
112th Avenue NE/NE 4th Street
Color: Average Delay
Bandwidth: Average Peak Hour Volume

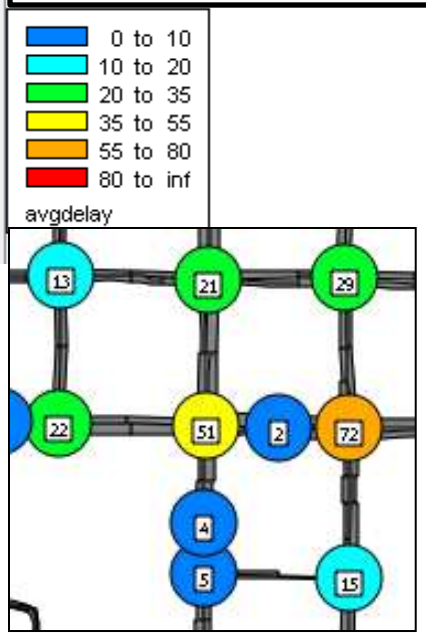


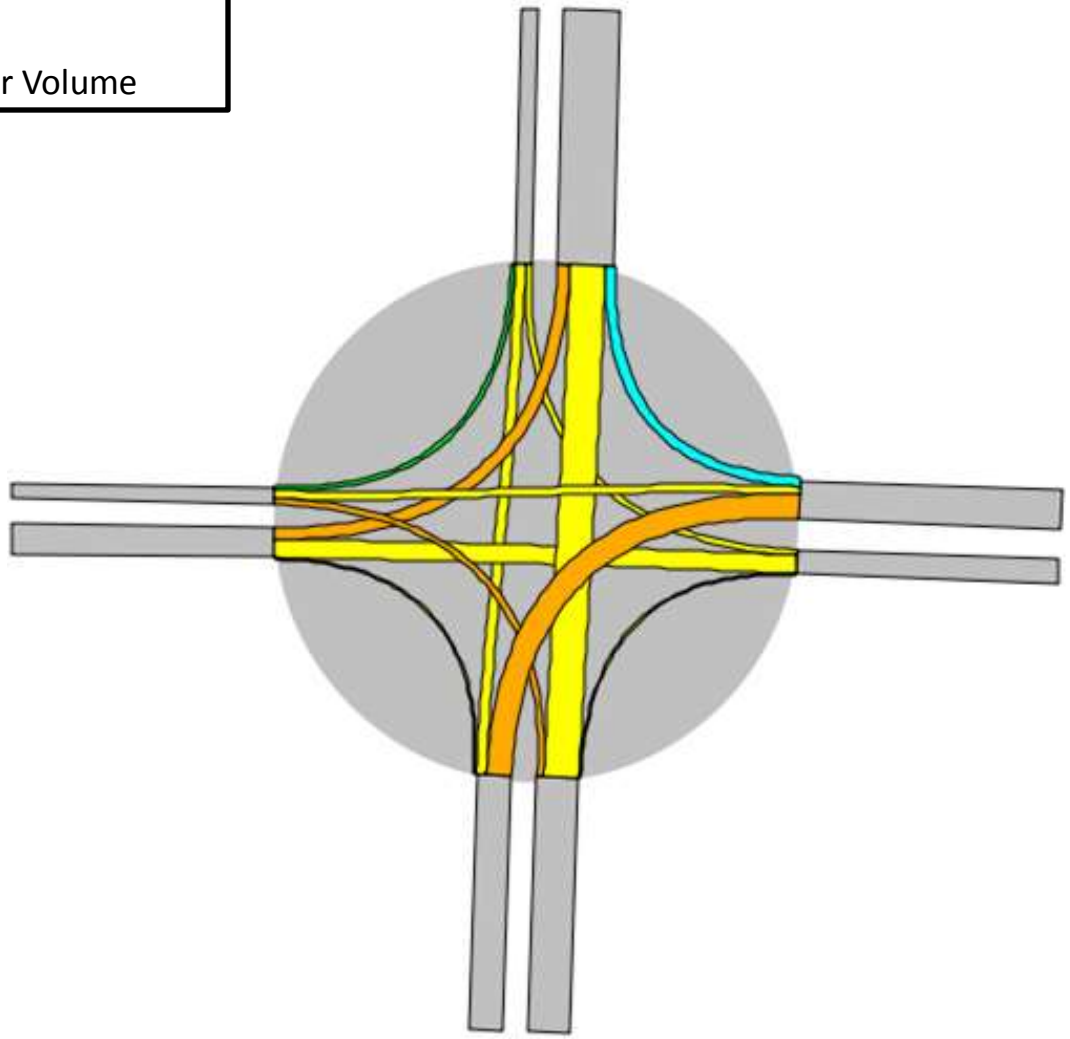


Private Vehicle Mobility

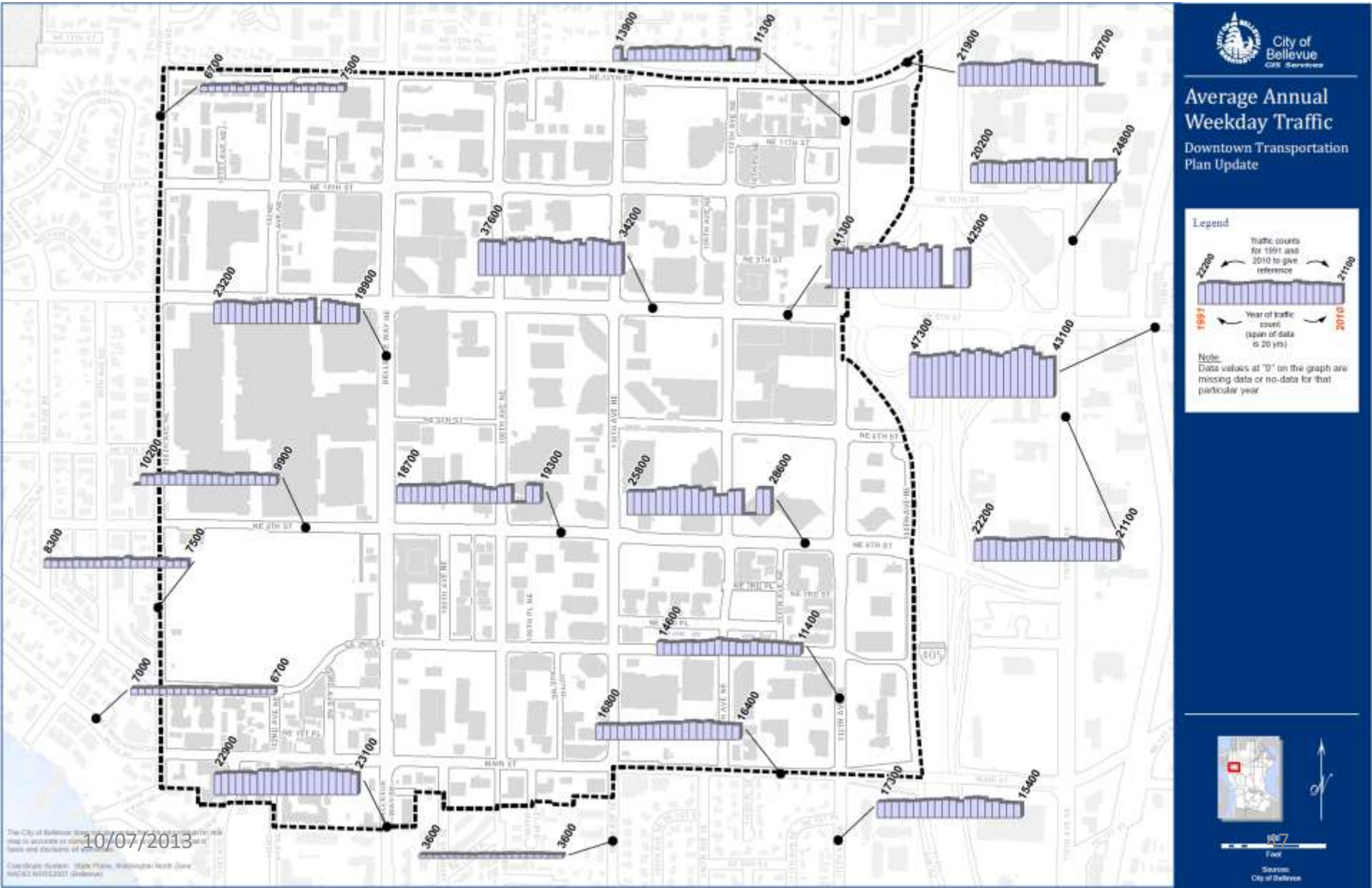
Bellevue Way/NE 8th Street (Dynameq)

2030 PM Build w/ Transit
Bellevue Way / NE 8th Street
Color: Average Delay
Bandwidth: Average Peak Hour Volume





Downtown Mobility Options yield stable vehicle volumes on arterials as Downtown grows



Downtown Transit Ridership

Includes Downtown Origins and Destinations
Boardings and Alightings, not Transfers